STATEMENT OF MARGARET GILLIGAN, ASSOCIATE ADMINISTRATOR FOR AVIATION SAFETY, FEDERAL AVIATION ADMINISTRATION, AND DAVID GRIZZLE, CHIEF OPERATING OFFICER FOR AIR TRAFFIC, BEFORE THE HOUSE COMMITTEE ON TRANSPORTATION AND INFRASTRUCTURE, SUBCOMMITTEE ON AVIATION ON A REVIEW OF AVIATION SAFETY IN THE UNITED STATES. APRIL 25, 2012.

Chairman Petri, Congressman Costello, Members of the Subcommittee:

Thank you for inviting us here today to update the Subcommittee on the Federal Aviation Administration's (FAA's) progress in implementing the safety enhancement initiatives in the Airline Safety and Federal Aviation Administration Extension Act of 2010 (Act), and other operational issues related to air traffic management.

First, we would like to begin with our progress on the initiatives in the 2010 Act. Over the past three years, the aviation industry, as with many other industries, has faced some tough economic challenges. During this period, we have remained vigilant in our oversight responsibilities to ensure that we continue to have the safest aviation system in the world, while also advancing aviation for the future. The provisions in the 2010 Act helped facilitate several of these major advancements, such as new flight, duty and rest requirements for pilots, and issuing a proposal to require air carriers to implement safety management systems. Although some of the provisions have taken longer than Congress anticipated under the provisions of the Act, we have made significant strides in accomplishing many of the objectives and I am here today to outline this progress for you.

The first area we would like to highlight for you is on pilot fatigue, which was identified as a top priority in the FAA's 2009 call to action. The FAA completed the final rule, which uses the latest fatigue science to address cumulative fatigue and how flight schedules affect the body's

24-hour clock in calculating appropriate duty periods for pilots. Flight duty periods under the new rule are more comprehensive and include flight-related activities such as time spent in training in an aircraft simulator, and standing by on-call for flights at an airport. These duties are part of the workday, contribute to fatigue, and must be counted as part of the core job of flying the airplane. We also took into account that off-duty activities, such as playing golf or commuting, have an impact on fatigue. To address this, the final rule establishes new fitness for duty requirements that serve as a reminder to both airlines and pilots of their professional responsibilities to ensure that rest periods are used for what they are intended--to rest.

In regard to commuting, the National Academy of Sciences (NAS) completed its study on pilot commuting in July 2011. The work by the NAS represents the most recent effort to determine whether there is a link between commuting and safety. The NAS panel identified neither a correlation between pilot commuting and safety nor a unique risk to aviation safety. However, the NAS also indicated that it was unable to find enough data to appropriately determine the relationship between commuting and safety. Based on the NAS study, and the National Transportation Safety Board's recommendation for the FAA to address commuting, the Department of Transportation Inspector General has recommended that we survey the data in order to conduct a proper analysis on what impact commuting may have on fatigue. We have committed to reviewing the available data and reporting to the Inspector General this fall on whether a further data collection effort would be warranted.

The next area we would like to address for you is our progress on developing requirements for air carriers to implement safety management systems. The FAA met the statutory deadline in the 2010 Act and issued a rulemaking proposal on October 29, 2010. It was

published in the Federal Register on November 5, 2010 and the comment period closed March 7, 2011. The FAA and industry recognize SMS as a holistic approach to safety that allows for trend spotting to help identify possible safety problems and correct them before they lead to accidents or incidents. We know that SMS is not a substitute for FAA oversight, inspection, and audits of air carriers to ensure compliance with existing regulations and will continue to ensure our responsibilities in these areas are met. SMS would allow us, however, to take a more proactive approach to focus on risk prediction and mitigation strategies in order to tailor our oversight resources in a more effective manner.

In the areas of pilot qualification and training requirements, the FAA has initiated two rulemaking projects to address the pilot training and experience requirements highlighted in the 2010 Act. The first rulemaking project, Qualification, Service, and Use of Crewmembers and Aircraft Dispatchers, is a comprehensive proposal that would revise the current qualification and training requirements for pilots, flight attendants and aircraft dispatchers. We first proposed this revision in 2009, one month prior to the Continental Flight 3407 accident. The FAA received over 3,000 pages of comments in response to this proposal. Following the accident, the National Transportation Safety Board issued several recommendations related to training requirements for air carrier pilots. The 2010 Act mandated some additional training requirements as well. In order to fully consider the comments, address many of the NTSB's recommendations resulting from the accident of Flight 3407, and incorporate the mandates of the Act, the FAA issued a supplemental proposal to permit interested parties to comment on the new requirements. The supplemental proposal was issued on May 20, 2011 and the comment period closed on September 19, 2011. The FAA is actively reviewing the comments to develop a final rule that addresses these training enhancements.

The second rulemaking proposal would substantially raise the qualification requirements for first officers (sometimes referred to as "co-pilots") who fly for U.S. passenger and cargo airlines, consistent with the mandate in the 2010 Act. The proposed rule would require first officers to hold an Airline Transport Pilot (ATP) certificate, requiring 1,500 hours of pilot flight time in most cases. Currently, these pilots are required to have a commercial pilot certificate, which requires only 250 hours of flight time. Some other highlights of the proposed rule include requiring pilots to have a minimum of 1,000 flight hours as a pilot in air carrier operations that require an ATP prior to serving as a captain for a U.S. airline; enhanced training requirements for an ATP certificate, including 50 hours of multi-engine flight experience; and completion of a new FAA-approved training program.

In the 2010 Act, Congress clearly acknowledged that the measurement of experience in determining when an individual may be ready to serve is not limited solely to the number of hours flown. Rather, education and other commercial flying experience must also be considered. Consistent with the requirements of the 2010 Act, this proposal also allows pilots with fewer than 1,500 hours of flight time to apply for an ATP certificate with restricted privileges. As proposed, this certificate would only be issued to graduates of a four-year baccalaureate aviation degree program with 1,000 hours of flight time, provided they have obtained a commercial pilot certificate and instrument rating from a pilot school affiliated with the university or college. Former military pilots with 750 hours of flight time may also qualify for this restricted ATP certificate. Pilots with this restricted certificate would only be able to serve as first officers for U.S. airlines. They could not use it to serve as a captain in any commercial flying operation that requires an ATP, nor use it to teach other pilots. Pilots seeking a restricted ATP would be tested to the same standard required for full ATP certificates, and they would be required to have the

equivalent minimum instrument time and night time flight hours as a full ATP certificate would require. The comment period for this proposed rulemaking closes April 30, 2012, and we will work diligently to develop a final rule that addresses the safety initiatives required in the 2010 Act.

Finally, we would like to address two areas of the 2010 Act that have presented some additional challenges for the FAA. The first concerns the area of pilot professionalism. We, and industry, recognize the need to continuously improve professional standards to improve flightdeck discipline. On September 15, 2010, the FAA established an Aviation Rulemaking Committee to develop recommendations on appropriate leadership training and professional development requirements for pilots. That group of experts delivered its recommendations in November 2010, and the FAA has considered them in developing a rule to address the mentoring mandate in the 2010 Act. We have not met the statutory deadline for this proposal because it has been difficult to draft a proposal that appropriately balances effectiveness and resulting benefits, with regulatory burden and cost, as we are required to do.

The second area concerns the requirements in the 2010 Act for the FAA to develop a centralized database of pilot records, which would include a pilot's training and experience history. While we have several major milestones in place and anticipate the database proof-of-concept by August 2012, there are many technical challenges. Some of these challenges include defining requirements for the records to be reported, and integrating thousands of records kept on all forms of media, from paper to microfiche to various automated records.

These initiatives are very complicated, and in some cases, very expensive. As the rulemakings progress, we are constantly evaluating how these provisions may best be leveraged to improve safety, while ensuring that the aggregate costs to society are not greater than these benefits as we are required to do. We remain committed to addressing these safety enhancements while continuing with our daily oversight responsibilities, and satisfying the requirements recently set forth in the FAA Modernization and Reform Act of 2012. In the 2012 Act, we have identified approximately 20 required rulemakings, and up to as many as 10 additional projects that will likely result in rulemaking, in addition to the 2010 Act's rulemaking requirements. Meeting the intent of Congress as anticipated under these Acts, while complying with our other requirements in conducting rulemaking, may present some challenges. However, as we have demonstrated with the provisions of the 2010 Act, our dedicated safety-minded aviation professionals will continue to aggressively work on these issues, while they also continue to perform inspections, analyze data, look for areas for improvement, and work with air carriers to enhance aviation safety.

We would also like to address the advancements we have made within our air traffic safety programs. The FAA has embraced a culture change in air traffic safety. As catastrophic events become extremely rare, the new approach focuses on risk, system design and the management of behavioral choices rather than forensics.

We have put in place an Air Traffic Management System that will provide more insight into the types of events that occur in the National Airspace System that could affect safety. The goal is to identify and mitigate risks early before an accident occurs. It is important to look at precursors because they provide a window into how the safety system is working and they help identify risks.

One area we have targeted is occurrence reporting within the FAA Air Traffic Organization. Occurrence reporting, which is now mandatory, emphasizes the responsibility of all FAA employees involved with air traffic services to report suspected unsafe air traffic occurrences. This gives the organization an opportunity to collect safety information to determine why adverse safety events happen and to develop interventions based on quantifiable data. The objective is to collect enough information to identify system risks, make long term corrections and prevent adverse safety events. We have made reporting this information easier by establishing a common software platform for all facilities which will also facilitate analysis now that it is in a digital format.

To collect and analyze this information, in 2010, the Air Traffic Organization began tracking losses of separation electronically, which include those errors commonly referred to as operational errors or pilot deviations. The tool that enables this new collection of data is known as the Traffic Analysis and Review Program (TARP) and is installed at all terminal radar facilities. TARP is an analytical tool available to local facilities and quality assurance staff to facilitate the detection of trends and development of corrective action. Quality assurance staff has also begun centralized processing of TARP alerts collected from over 20 facilities. These facilities are capable of collecting alerts 24 hours a day, 7 days a week, and we are adding new facilities operating at this level every month. Our goal is to be able to process alerts from all facilities by September 2012.

Another tool that has had an impact on our cultural change is our Air Traffic Safety Action Program (ATSAP). ATSAP is a confidential, non-punitive reporting program that empowers FAA employees to play a direct role in safety. Using this tool, we have seen an

increase in safety reporting that has produced a wealth of information to help the FAA identify potential risks in the system and take swift action to address them.

The FAA is also continuing efforts to improve safety on the nation's airport runways. The FAA is working with all stakeholders on innovative programs and techniques to reduce the number and severity of surface incidents. Some of the runway incursion prevention actions include the deployment of technology, better communication and instructions such as line-up-and- wait, explicit taxi instructions for runway crossings, and deploying local runway safety action teams throughout the country. These efforts have contributed to a reduction in total runway incursions from 1,009 runway incursions in FY 2008 to 954 in FY 2011.

As the results of these programs have demonstrated, we have embraced the necessary cultural changes to allow us to identify and mitigate risks early. We remain committed to empowering our employees to be proactive and providing them with the tools they need to play a direct role in the safety of the National Airspace System.

Chairman Petri, Congressman Costello, Members of the Subcommittee, this concludes our prepared remarks. We would be happy to answer any questions that you might have.